

What is claimed is:

1. An automatic and consecutive target firing structure, comprising:
 - a base dock formed in a disk shape having an annular ring extending from the top surface thereof;
 - a first driving source and a second driving source located on said base dock;
 - a rotary mechanism including a rotary disk mounted onto said annular ring, the rotary disk having a gear at the bottom thereof to be driven by said first driving source through a reduction gear mechanism, a first gear rack, a second gear rack and a third gear rack located on the periphery thereof at varying elevations, two arched and upright ramp flanges opposing each other on said rotary disk that have respectively a sloped top edge directly upwards from a head end thereof, two arched actuators extending from the top side thereof, and two bucking members extending downwards from the periphery of the bottom thereof;
 - a target feeding unit located on the top section of said rotary mechanism including a platform to support a target deck, said platform having an opening in the center, said target deck having two openings on the left side and the right side for holding respectively a hollow target barrel thereon and a carved out target firing space in the middle, said target barrel having a barrel seat at the bottom that is larger than the

periphery of said target barrel, said barrel seat having an outer side pivotally engaged with two horizontal brake levers in up and down manner, each brake lever having one end extending outwards to form a lug and another end extending inwards to

5 form a bracing plate for holding a clay target located at the bottom, each clay target having annular latch teeth on the bottom, said platform having an anchor strut on a rear side to pivotally couple with a rocker arm and a rear end of a sway plate, and being run through by a strut which has a upper end

10 and a lower end coupling with another end of said rocker arm and an aperture of said sway plate, said sway plate having respectively an axle hub extending from the left side and the right side for holding said clay target, said axle hub having a through opening in the center, said rocker arm having a

15 bottom driven by a transmission gear to swivel to the left and right side, said transmission gear being engaged with said third gear rack of said rotary mechanism, said base dock having two vertical pillars on the left side and the right side of a front section to couple respectively at the bottom with a first

20 gear and a second gear that engage respectively with said first gear rack and said second gear rack, each of said pillars have a top section coupling with a upper wing and a lower wing that correspond respectively the lugs of said barrel seat;

25 a lifting unit located in the center of said rotary disk including a lifting deck which has respectively a turning wing

on the left side and the right side, said turning wing having a bottom section corresponding to said ramp flanges of said rotary disk, said lifting deck housing said second driving source which has a spindle running through the through opening of said platform, said spindle having a top section forming a plurality of teeth in an annular manner to engage with said latch teeth at the bottom of said clay target;

10 a control unit including a rotary wing pivotally engaged with said base dock that has a first end driven by the actuators of said rotary disk to rotate and a second end, and a rocker arm which has a first end transversely connecting to said base dock in a pivotal manner, said rocker arm being pressed by the second end of said rotary wing and having a top end pivotally coupled with a bottom end of a control bar through a bridging member, said control bar having a middle portion pivotally engaged with said platform and a distal end pendent above the through opening of said platform, and a restoring spring which has one end coupling on said control bar and another end coupling on said platform; and

20 25 a trigger unit located out side said rotary disk including a rotary member pivotally engaged with said base dock, said rotary member having a actuating end on an outer side and a trigger section on an inner side, the actuating end having an outer side coupling with an inner conductive reed and an outer conductive reed to connect to a positive and a

negative circuit, said trigger section being pushed by the bucking members of said rotary disk.

2. The automatic and consecutive target firing structure of claim 1, wherein said first and said second driving sources are 5 motors, said base dock having a roller pivotally mounted on the bottom of a front side and a transverse axle on a rear side thereof, said axle having a left side and a right side coupling respectively with a wheel and running through a driving gear which is driven by said reduction gear mechanism, said base 10 dock further having a plurality of posts to hold said platform, said target deck having a retaining edge formed on the periphery of said openings located on the left side and the right side to confine said barrel seat.
3. The automatic and consecutive target firing structure of 15 claim 1, wherein said clay target has an opening in the center, said opening having a peripheral wall which has said latch teeth formed on the bottom side thereof, said target barrel having a upright rod in the center to run through the opening of said clay target.
- 20 4. The automatic and consecutive target firing structure of claim 1, wherein said barrel seat has a vertical pivot pin to couple with said two brake levers.
5. The automatic and consecutive target firing structure of claim 1, wherein said transmission gear has a top end 25 pivotally coupling with a transmission disk which has two

disk wings on the periphery thereof, said third gear rack having a front end extending to form a brake section higher than said third gear rack, said disk wings corresponding to said brake section, said transmission disk having a push bar 5 extending from the top surface abutting the periphery, said rocker arm having a flute on the bottom to couple with the top end of said push bar and allow the top end to slide therein.

6. The automatic and consecutive target firing structure of claim 1, wherein said platform has an arched slot in the center 10 to allow said strut to pass through and move therein.

7. The automatic and consecutive target firing structure of claim 1, wherein said lifting deck of the lifting unit has four tubes each being coupled with a vertical strut on said platform, said vertical strut being coupled with an elastic element which 15 has an upper end compressing a lower side of said platform and a lower end coupling on said tube, said lifting deck having a shell in the center to house said second driving source of which spindle having said teeth at the top end to engage with said latch teeth at the bottom of said clay target.

20 8. The automatic and consecutive target firing structure of claim 1, wherein said control bar of the control unit is an arched arm having two ends facing downward and a distal end forming a pressing end, said control bar being covered by a safety cap from above corresponding to said target firing 25 space.

9. The automatic and consecutive target firing structure of claim 1 further having a shell cap covering the base dock to form a toy model, the shell cap having an opening on the left side and the right side for housing said target barrel and an 5 exit opening in the center corresponding to said clay target, said first and said second driving source being connected respectively to a battery, said first driving source being connected to said inner conductive reed and said outer conductive reed through a circuit and a circuit start switch 10 located on said base dock.

10. The automatic and consecutive target firing structure of claim 1, wherein said barrel seat further has another two brake levers on a direction corresponding to said two brake levers to form two pairs of symmetrical brake levers to be pushed by 15 said two lugs.